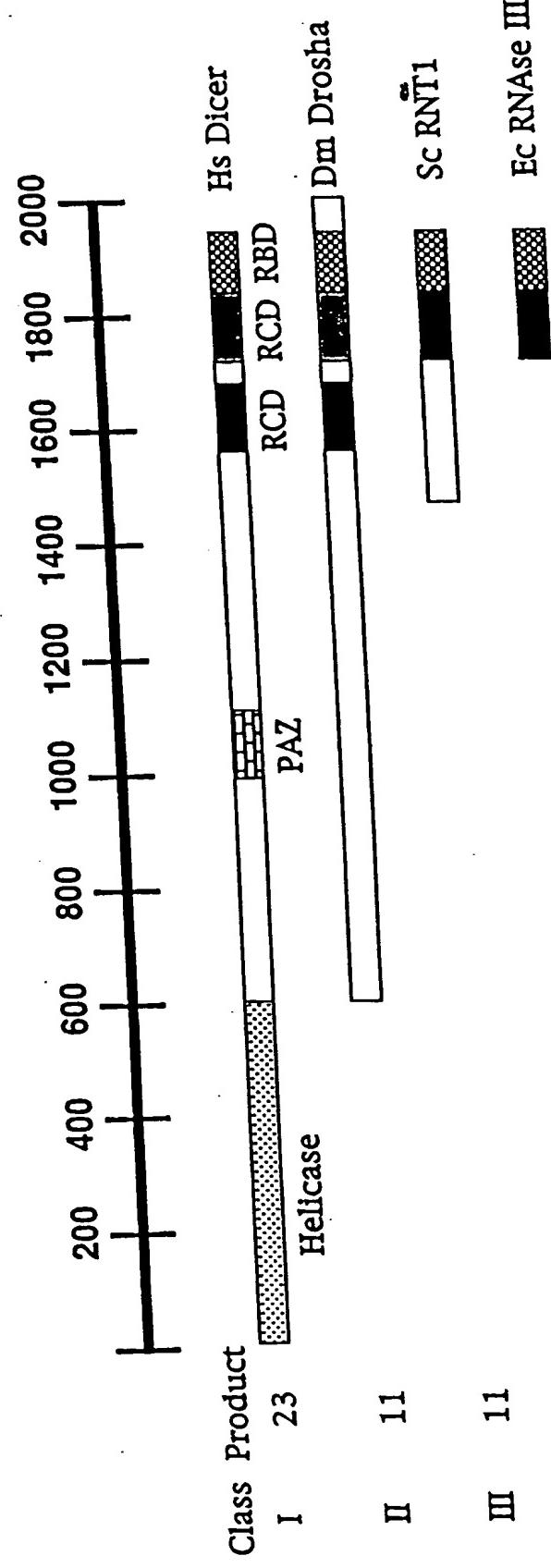


Figure 1

RNase III class proteins



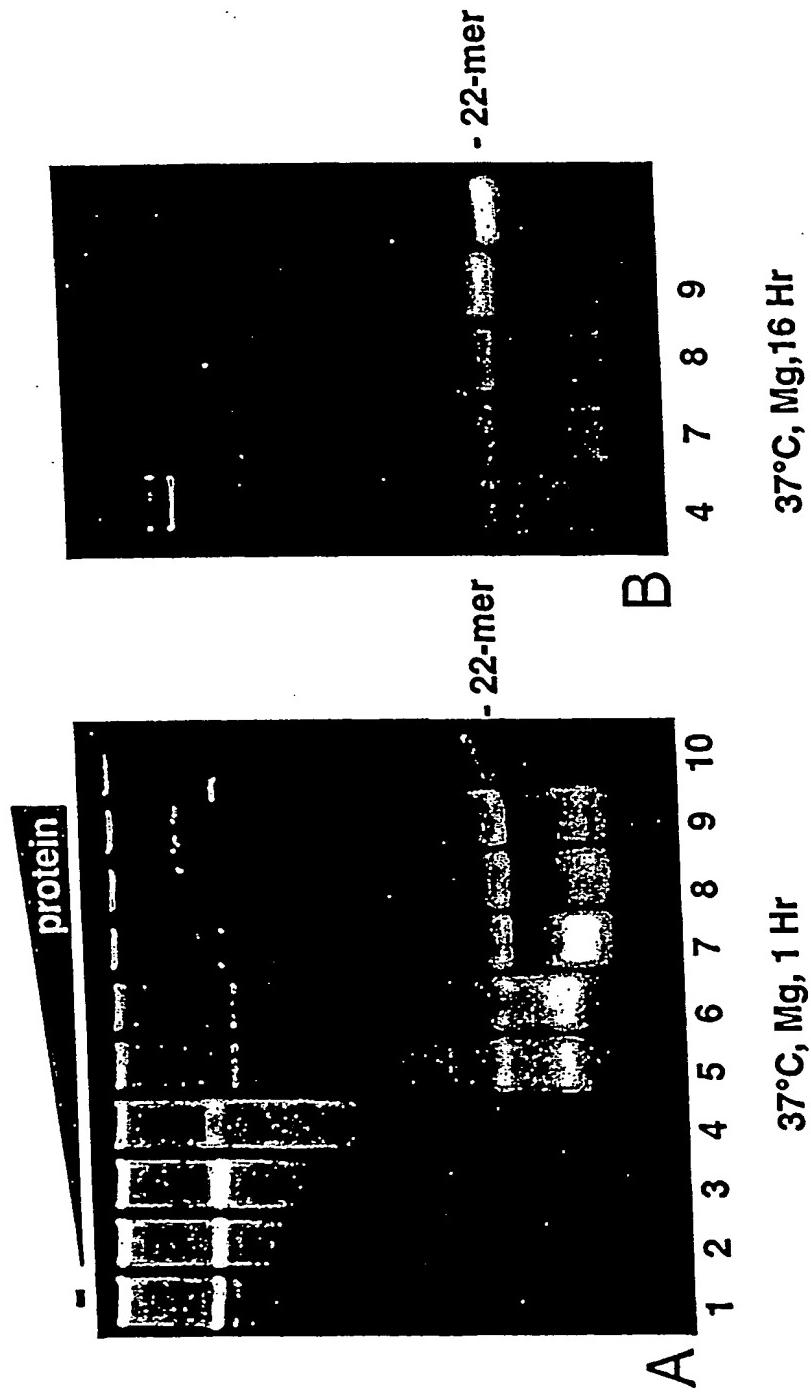
RCD - RNase III RNA cleavage domain
 RBD - RNase III dsRNA binding domain

Structure, 9, p. 1225, (2001)

Figure 2

RNAse Activity of E38A

Figure 3



RNAse Activity of E38A

Figure 4

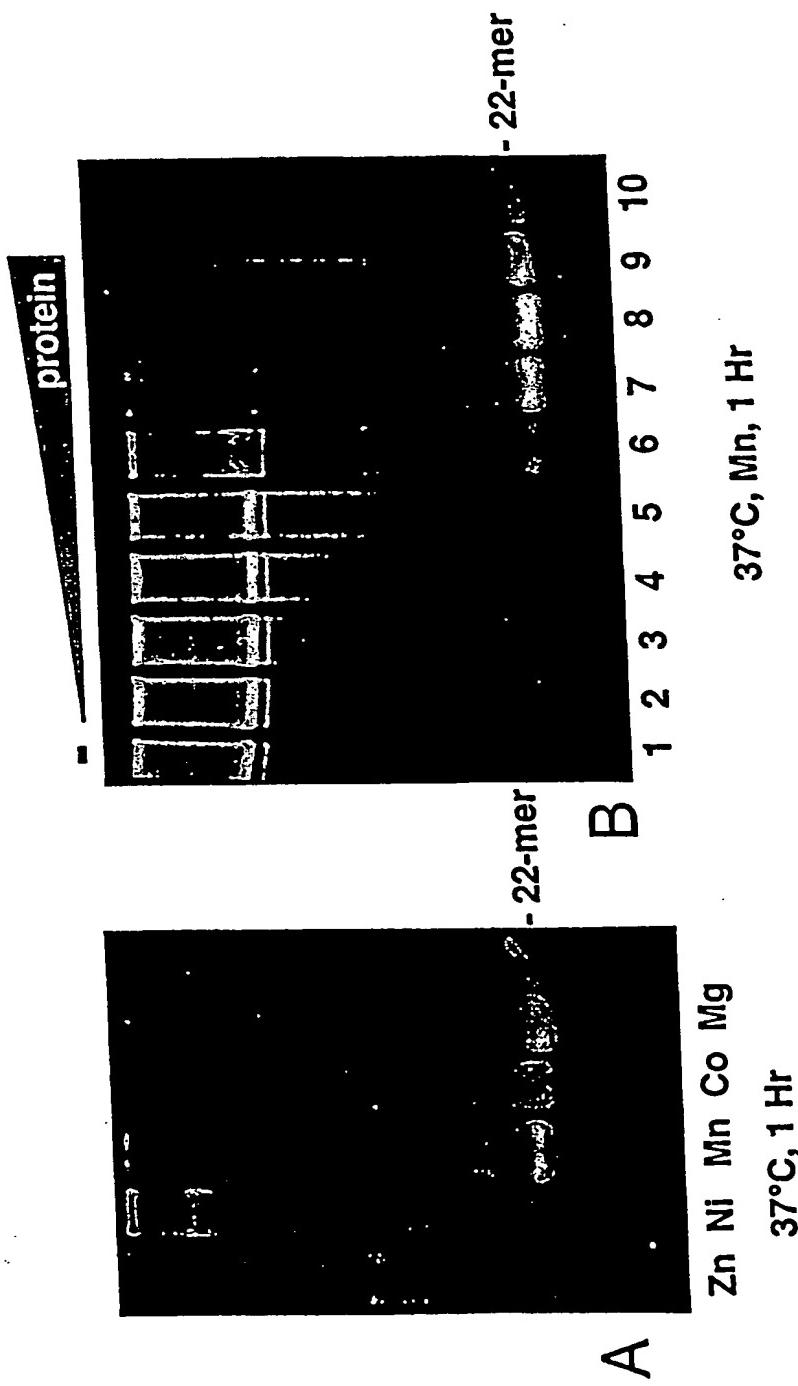


Figure 5

RNase Activity of E38A

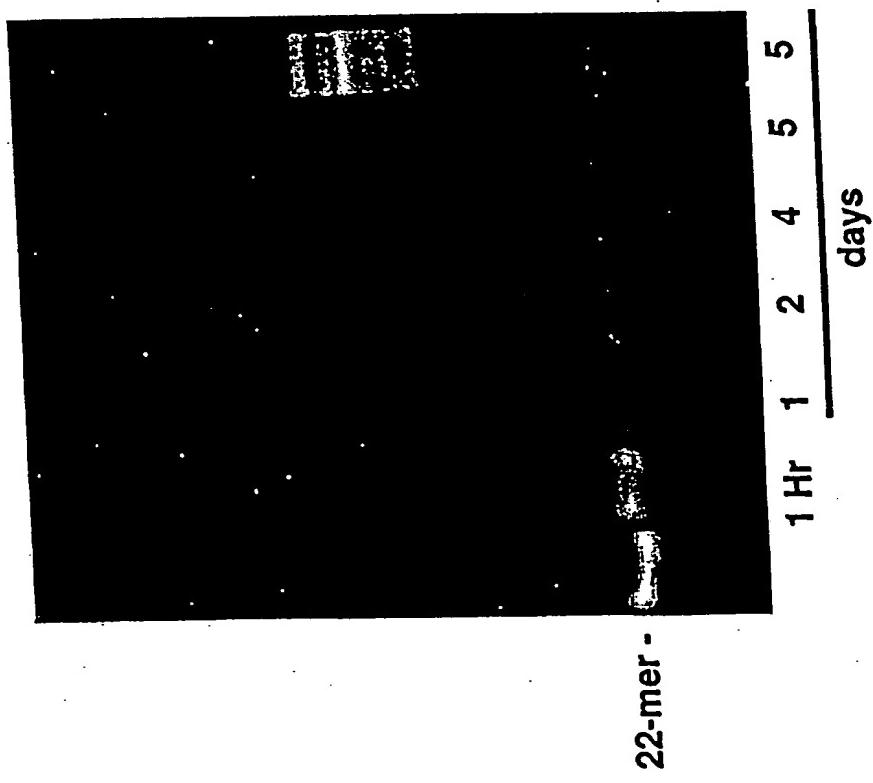


Figure 6
RNase Activity of E38A

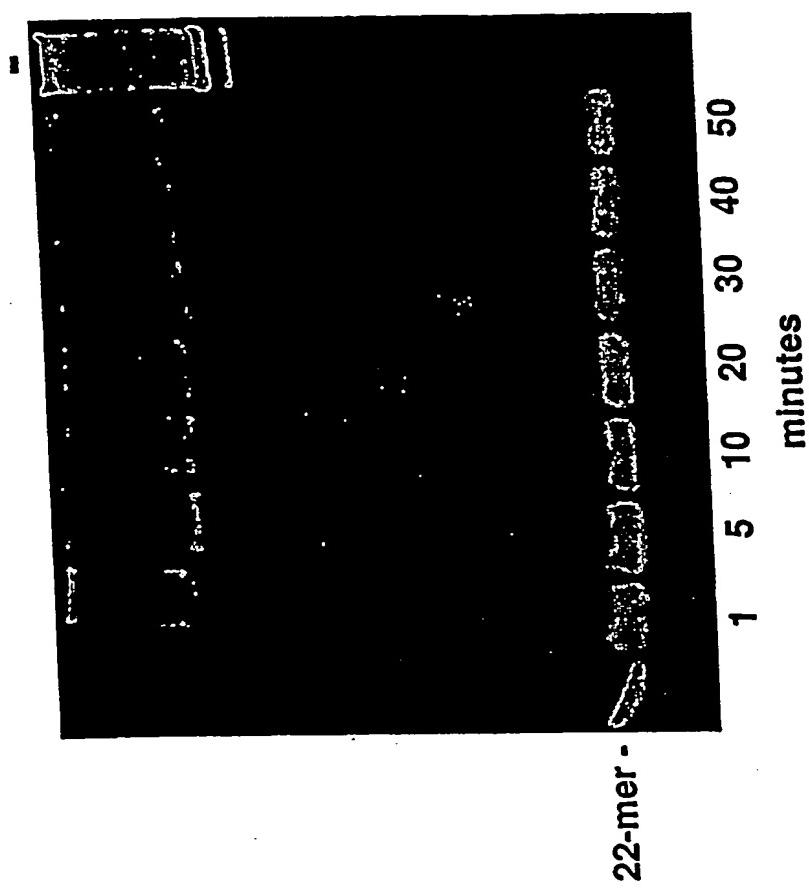


Figure 7
RNase Activity of E38A

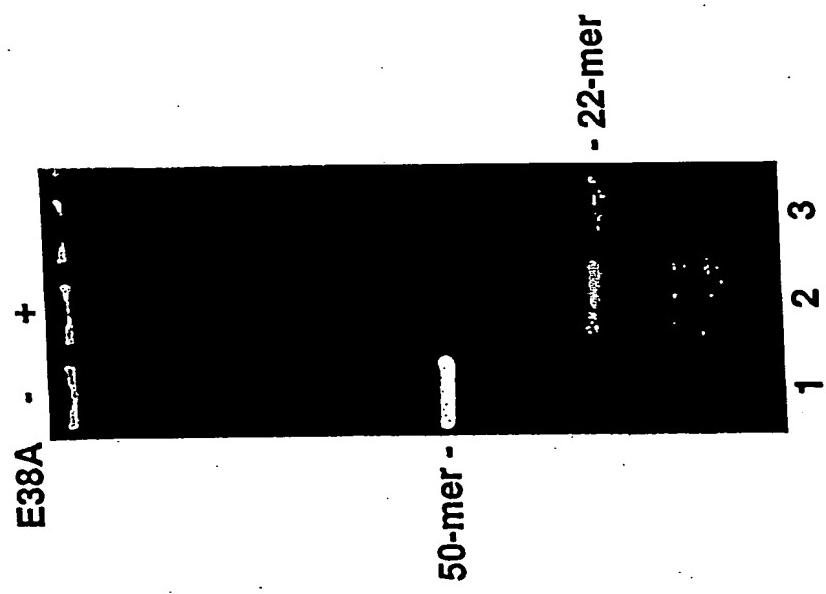
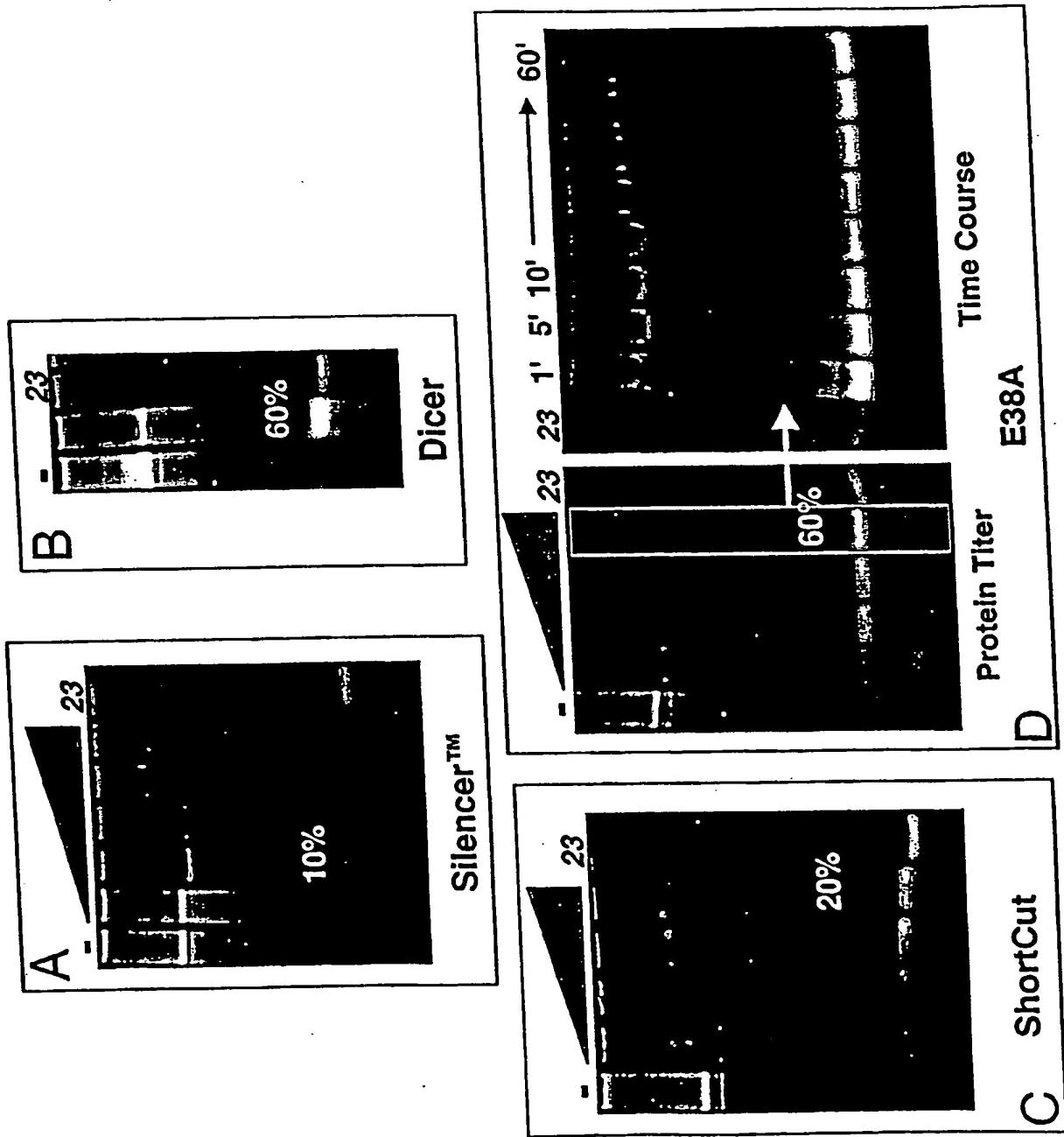
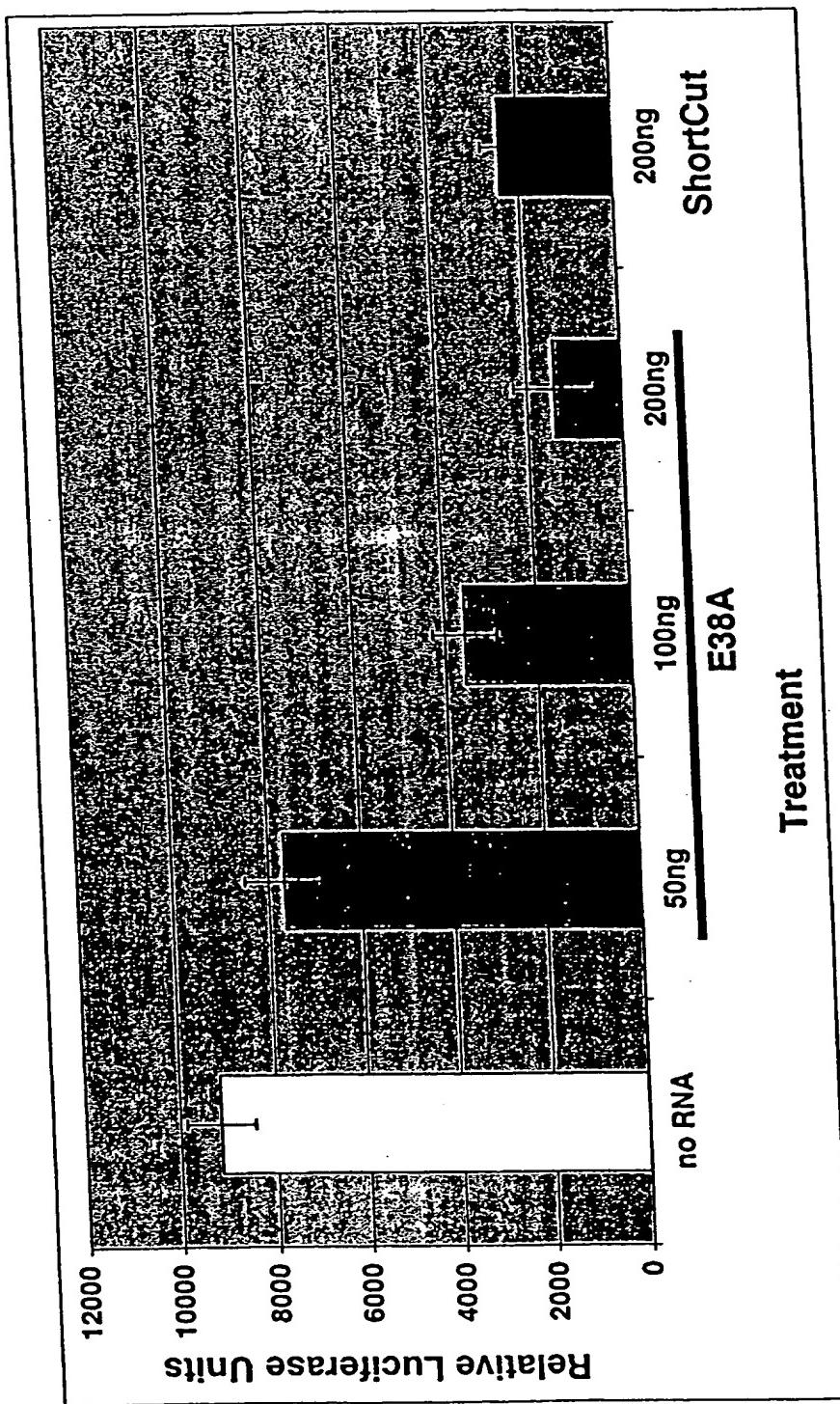


Figure 8
Comparisons



RNAi activity of E38A-cleaved dsRNA

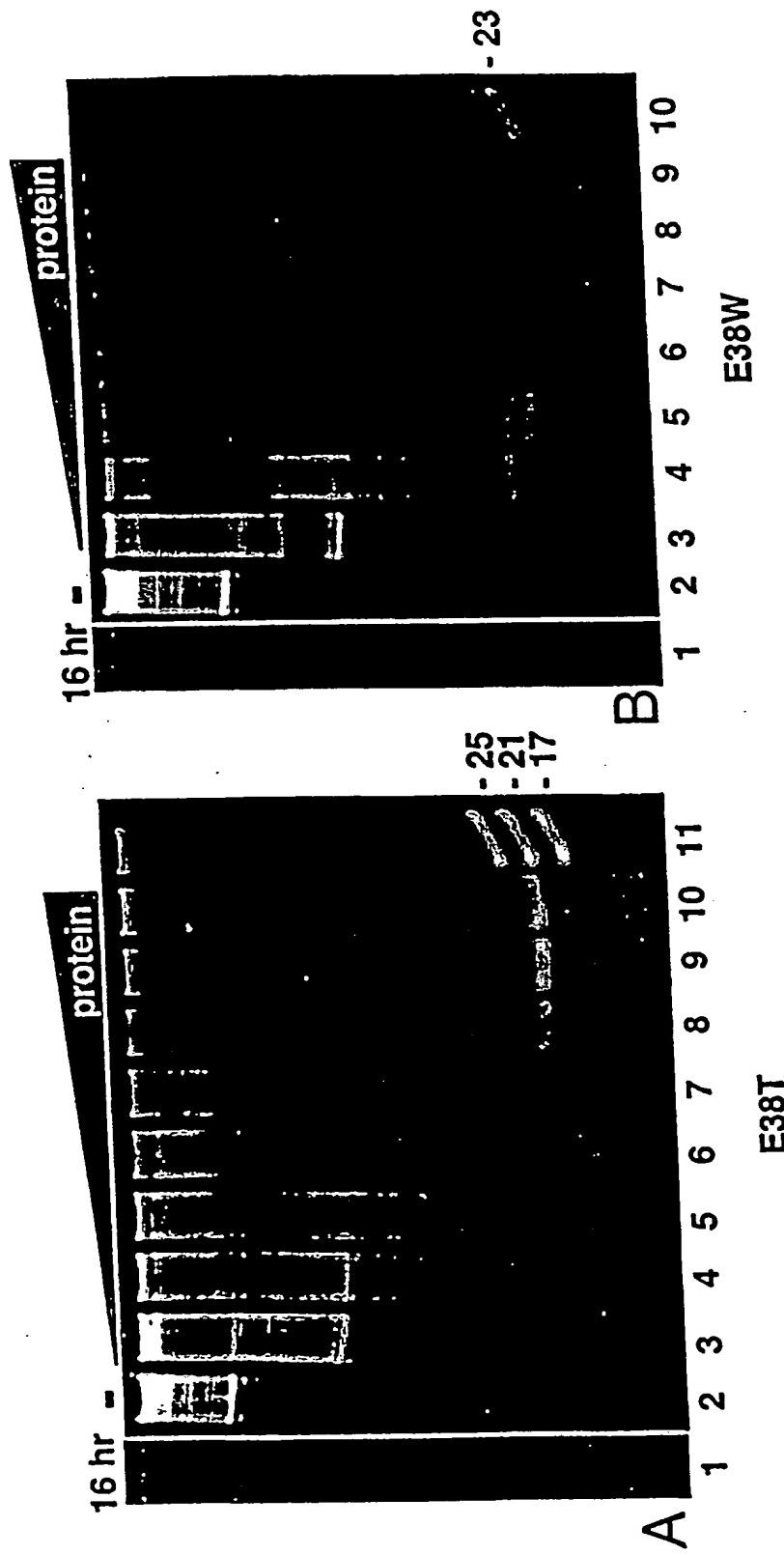
Figure 9



Luciferase activity in transfected NIH 3T3 cells

RNAse Activity of E38T & E38W

Figure 11



E. coli RNase III Mutants

Figure 12

<i>Aquifex aeolicus</i>	<i>wt</i>	37	E T L E F L G D A	63	R E G F L S	107	D V F E A L
<i>E. coli</i>	<i>wt</i>	38	E R L E F L G D S	64	D E G D M S	114	D T V E A L
E38D	<i>wt</i>	38	D R L E F L G D S	64	D E G D M S	114	D T V E A L
E38K	<i>wt</i>	38	K R L E F L G D S	64	D E G D M S	114	D T V E A L
E38Q	<i>wt</i>	38	Q R L E F L G D S	64	D E G D M S	114	D T V E A L
E38P	<i>wt</i>	38	P R L E F L G D S	64	D E G D M S	114	D T V E A L
E38V	<i>wt</i>	38	V R L E F L G D S	64	D E G D M S	114	D T V E A L
E38A	23	38	A R L E F L G D S	64	D E G D M S	114	D T V E A L
E38T	23	38	T R L E F L G D S	64	D E G D M S	114	D T V E A L
E38W	23	38	W R L E F L G D S	64	D E G D M S	114	D T V E A L
D45V	<i>wt</i>	38	E R L E F L G V S	64	D E G D M S	114	D T V E A L
D45A	/	38	E R L E F L G A S	64	D E G D M S	114	D T V E A L
E65P	<i>wt</i>	38	E R L E F L G D S	64	D P G D M S	114	D T V E A L
E65A	23	38	E R L E F L G D S	64	D A G D M S	114	D T V D A L
E117D	/	38	E R L E F L G D S	64	D E G D M S	114	D T V E A L
E38Q,E65P	<i>wt</i>	38	Q R L E F L G D S	64	D P G D M S	114	D T V E A L
E38A,E65A	<i>wt</i>	38	A R L E F L G D S	64	D A G D M S	114	D T V E A L

Figure 13

E117D, E38A mixtures produce multimers of
23 bp product

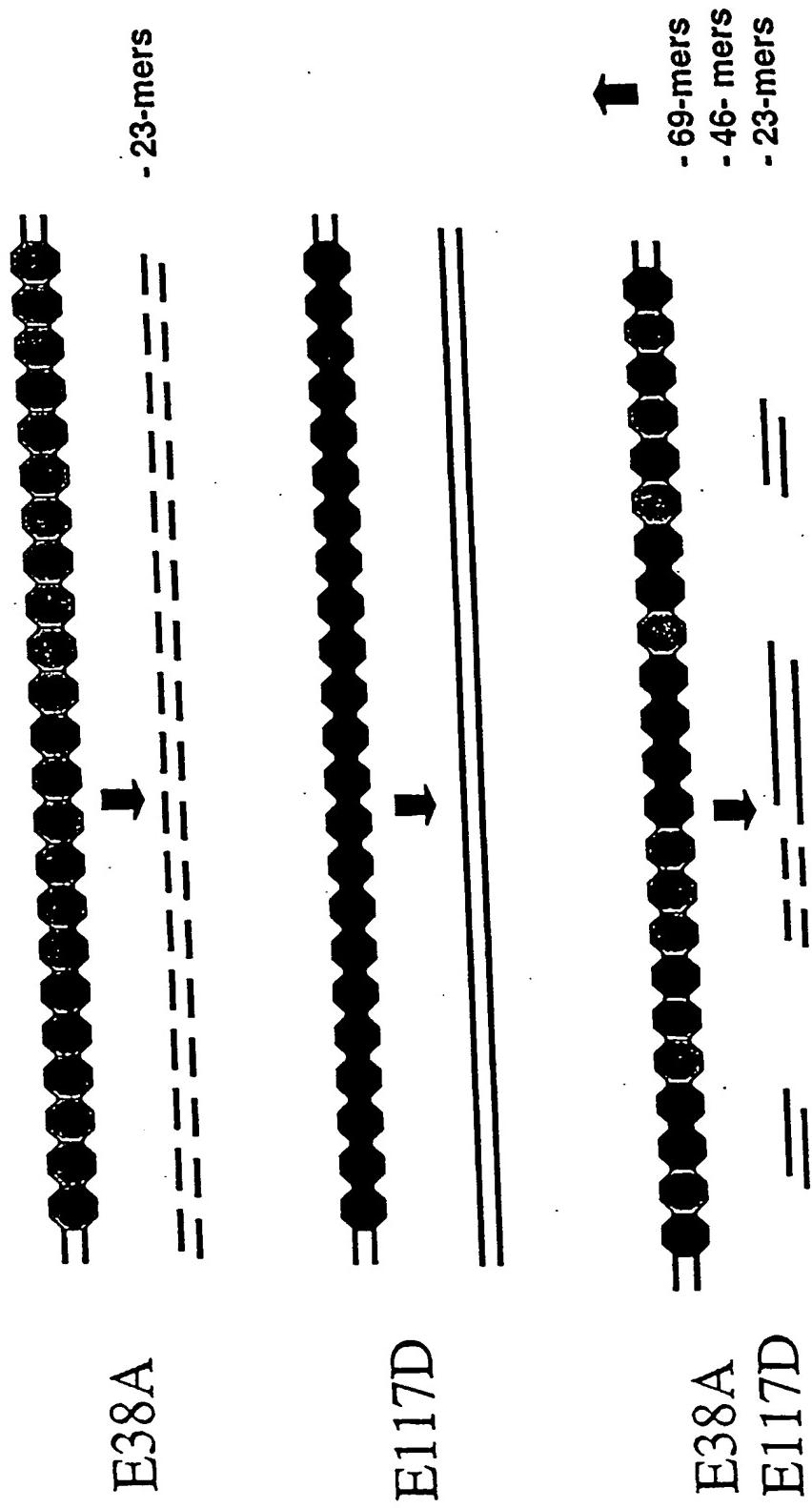


Figure 14
E117D, E38A mixtures produce multimers of
23 bp product

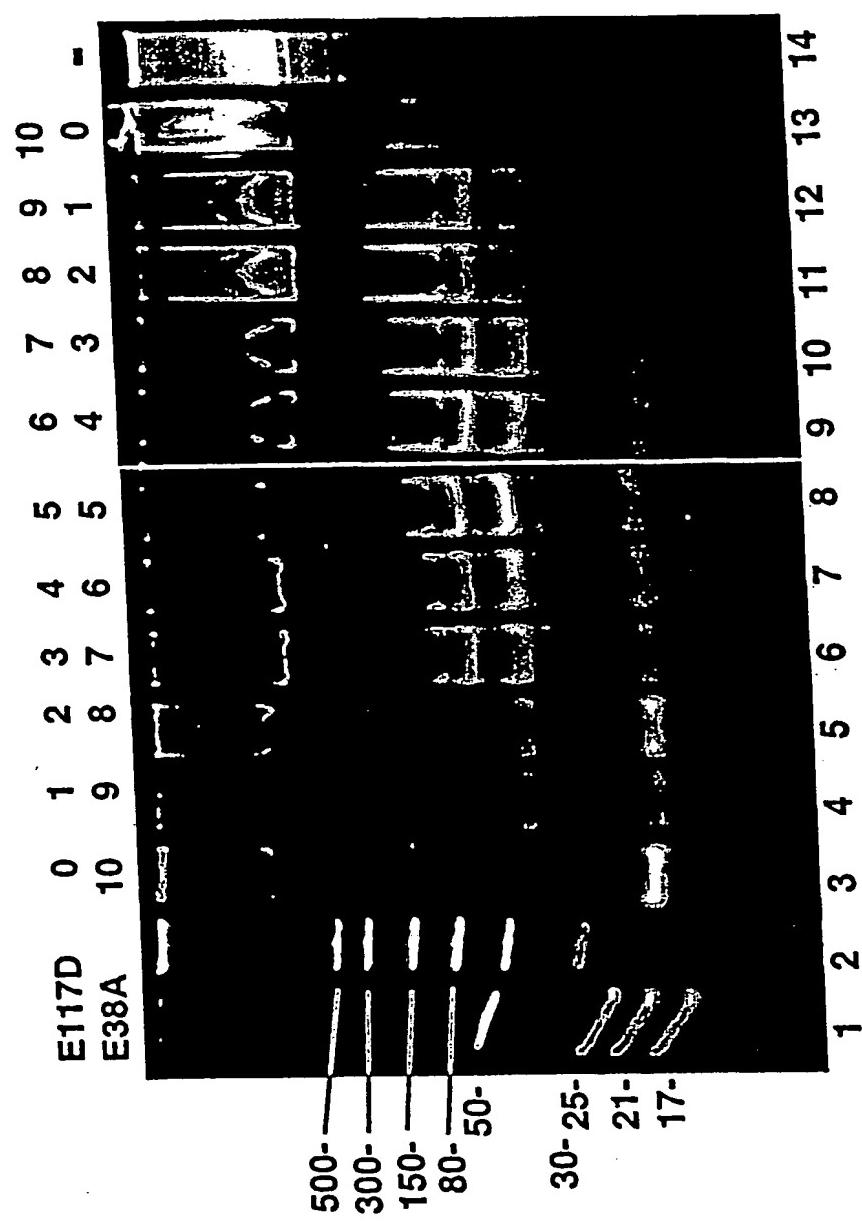


Figure 15
E117D, WT mixtures produce multimers of
23 bp product

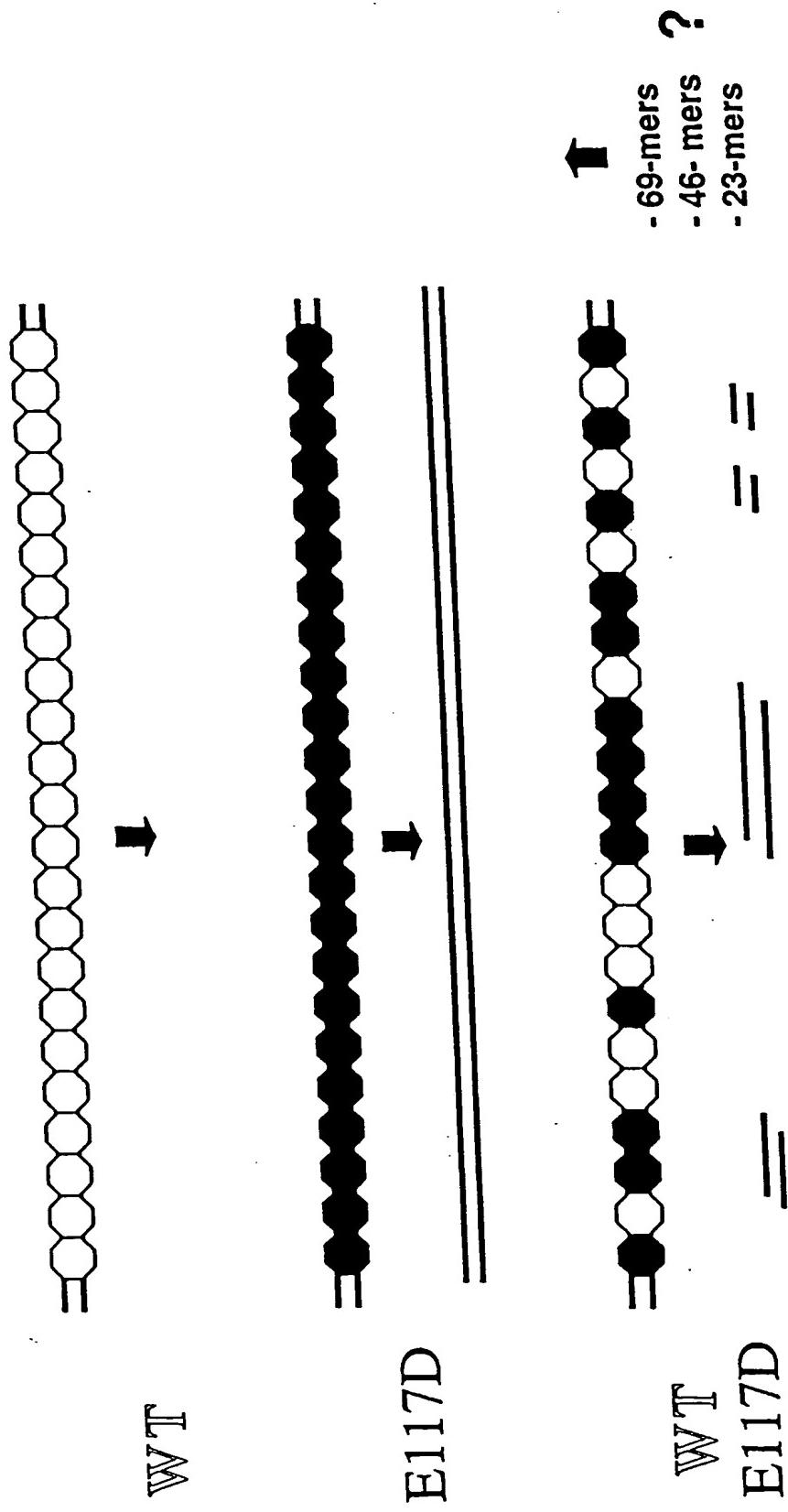
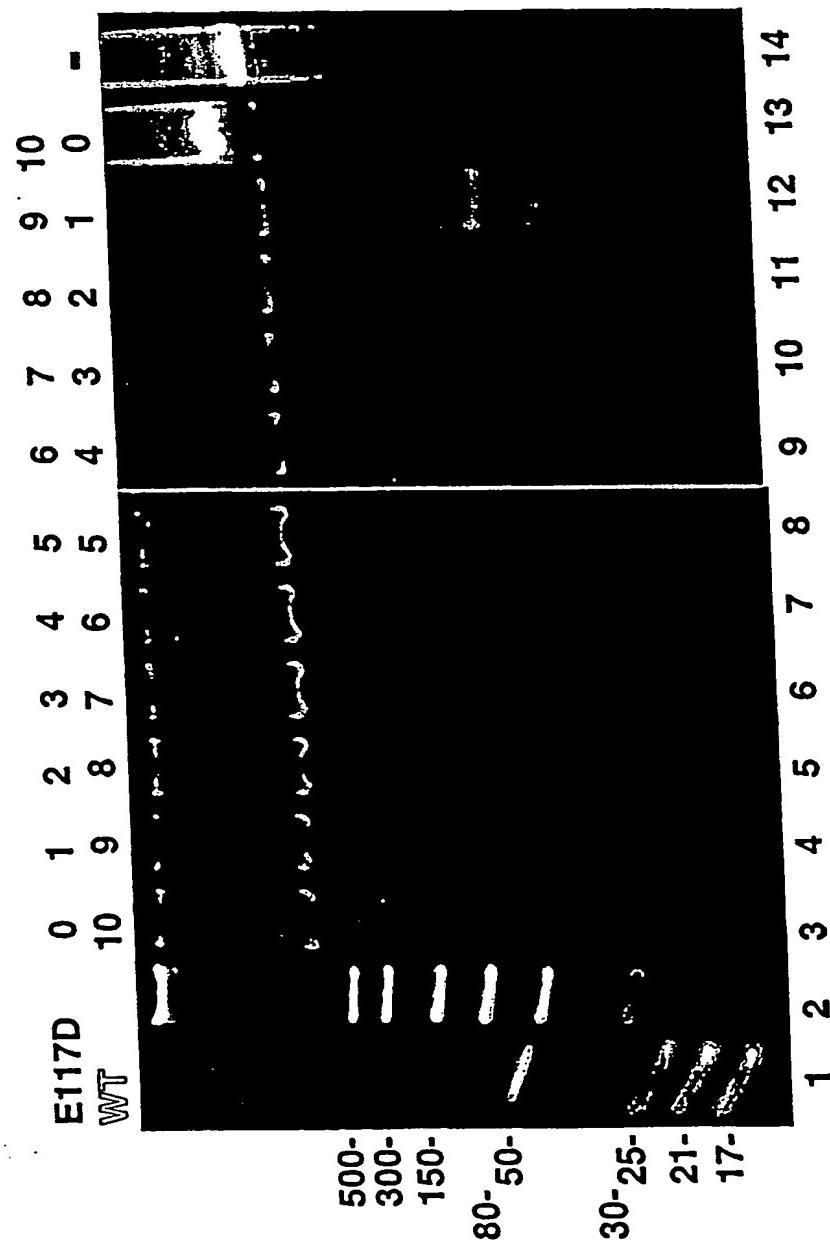


Figure 16

E117D, WT mixtures produce multimers of 23 bp product



siRNA evaluation tool (EXPERIMENTAL) v0.57 results - Thu Jan 13 15:59:54
2005

Query: Homo sapiens tumor protein p53 (Li-Fraumeni syndrome)
NM_000546 (TP53), mRNA.
Query Length: 2629 nt
Displayed Region: 1 - 2608
Database Searched: Homo_sapiens -- NCBI :: hs.fna
Min Match Length: 21 nt

Hits to the following DB sequences were filtered out of the results (user
cutoff 1.0E-70):
gi|8400737|ref|NM_000546.2| E-val:0.0

Current resolution is 4 base(s).

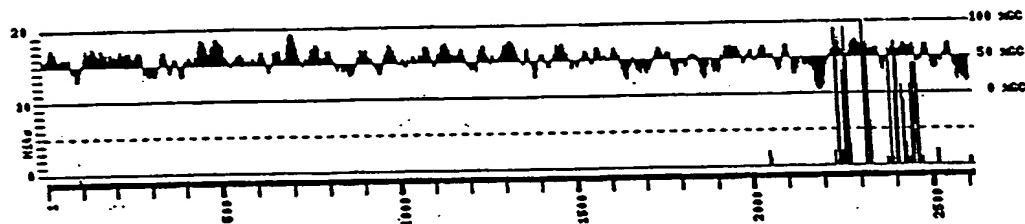


Figure 17

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- BLACK BORDERS**
- IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- FADED TEXT OR DRAWING**
- BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- SKEWED/SLANTED IMAGES**
- COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- GRAY SCALE DOCUMENTS**
- LINES OR MARKS ON ORIGINAL DOCUMENT**
- REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.